

CLAIMS:

1. A support structure for a plurality of printheads comprising:
an elongated beam formed from two distinct materials, each material provided in
segments, the segments of each material alternating along the length of the structure and
5 being bonded to one another end to end, the coefficient of thermal expansion of the beam
being substantially equal to that of the printheads.
2. The support structure of claim 1, wherein:
the combined lengths of two adjacent segments define a pitch and the coefficient of
10 thermal expansion across the pitch is substantially equal to that of a printhead carried by
that pitch.
3. The support structure of claim 1, wherein:
one material has a coefficient of thermal expansion greater than the other.
- 15 4. The support structure of claim 3, wherein:
the coefficient of thermal expansion of one material is greater than that of silicon
and the coefficient of thermal expansion of the other material is less than that of
silicon.
- 20 5. The support structure of claim 1, and further comprising:
the combined lengths of two adjacent segments define a beam pitch:
a coefficient of thermal expansion along the beam pitch being substantially equal to
that of a printhead carried by that pitch;
25 there being a plurality of printhead modules are carried by the support structure and
being spaced apart by a printhead pitch; and
the beam pitch and printhead pitch are substantially the same.
6. The support structure of claim 5, wherein:
30 the printhead modules are all silicon MEMS type modules.

7. The support structure of claim 6, wherein:
the modules further comprise a silicon substrate in which is formed an array of ink
ejector nozzles.
- 5 8. The support structure of claim 5, wherein:
the coefficient of thermal expansion of a beam pitch is about 2.5×10^{-6} metres per
degree Celsius.
9. The support structure of claim 5, wherein:
10 the coefficient of thermal expansion of the support structure is about 2.5×10^{-6}
metres per degree Celsius.